RCF

art 7series

ART 7 SERIES

PROFESSIONAL ACTIVE SUBWOOFERS

a new generation of speakers is born and it's ready to rock audiences all over the world

SAFETY PRECAUTIONS

Before connecting and using the amplifier, please read this instruction manual carefully and keep it on hand for future reference. The manual is to be considered an integral part of the product and must accompany the amplifier when it changes ownership as a reference for correct installation and use as well as for the safety precautions. RCF S.p.A. will not assume any responsibility for the incorrect installation and/or use of the product.

⚠ **WARNING: To prevent the risk of fire or electric shock, never expose this equipment to rain or humidity.**

1. All the precautions, in particular the safety ones, must be read with special attention, as they provide important information.
2. The power supply voltage of this equipment is sufficiently high to involve a risk of electrocution; therefore, never install or connect the product with the power supply switched on.
3. Before powering up the amplifier, make sure that all the connections have been made correctly and that the voltage of your power mains corresponds to the voltage shown on the rating plate on the unit; if it does not, please contact your RCF dealer.
4. The metallic parts of the unit are earthed by means of the power cable. In the event that the current outlet used for power does not provide the earth connection, contact a qualified electrician to earth the equipment using the dedicated terminal.
5. To protect the power cable from damage, make sure that it is positioned so that it cannot be stepped on or crushed by objects.
6. To prevent the risk of electric shock, never open the amplifier. There are no parts on the inside that the user needs to access.
7. Make sure that no objects or liquids can get into the amplifier, as this may cause a short circuit.
8. Never attempt to carry out any operations, modifications, or repairs that are not expressly described in this manual. Contact your authorized service centre or qualified personnel should any of the following occur:
- the amplifier does not function (or functions in an anomalous way);
- the power supply cable has been damaged;
- objects or liquids have got into the unit;
- the amplifier has been subject to heavy impact.

9. When the amplifier is not to be used for long periods of time, switch it off and disconnect the power cable.
10. If the amplifier begins to emit any strange odours or smoke, switch it off immediately and disconnect the power supply cable.
11. Do not connect this product to any equipment or accessories not specified.
For suspended installation, only use the dedicated anchoring points and do not try to hang this product using HANDLES or elements that are unsuitable or not specific for this purpose.
Also check the suitability of the support surface to which the product is anchored (wall, ceiling, structure, etc.), and the components used for attachment (screw anchors, screws, brackets not supplied by RCF etc.), which must guarantee the security of the system/installation over time, also considering, for example, the mechanical vibrations normally generated by the transducer.
To prevent the risk of falling equipment, do not stack multiple units of this product unless this possibility is specified in the instruction manual.
12. RCF S.p.A. strongly recommends this product is installed by professional qualified installers (or specialised firms) who can ensure correct installation and certify it according to the regulations in force.
THE ENTIRE AUDIO SYSTEM MUST COMPLY WITH THE CURRENT STANDARDS AND REGULATIONS REGARDING ELECTRICAL SYSTEMS.
13. SUPPORTS AND TROLLEYS
The equipment should only be used on trolleys or supports, where necessary, that are recommended by the manufacturer. The equipment/support/trolley assembly must be moved with extreme caution. Sudden stops, excessive pushing force and uneven floors may cause the assembly to overturn.
14. There are numerous mechanical and electrical factors to be considered when installing a professional audio system (in addition to those which are strictly acoustic, such as sound pressure, angles of coverage, frequency response, etc.).
15. HEARING LOSS
Exposure to high sound levels can cause permanent hearing loss. The acoustic pressure level that leads to hearing loss is different from person to person and depends on the duration of exposure. To prevent potentially dangerous exposure to high levels of acoustic pressure, anyone who is exposed to these levels should use adequate protection devices. When a transducer capable of producing high sound levels is being used, it is therefore necessary to wear ear plugs or protective earphones. See the technical specifications in the instruction manual for the maximum sound pressure the loudspeaker is capable of producing.

IMPORTANT NOTES

To prevent the occurrence of noise on the cables that carry microphone signals or line signals (for example, 0 dB), only use screened cables and avoid running them in the vicinity of:
- equipment that produces high-intensity electromagnetic fields (for example, high power transformers);
- mains cables;
- lines that supply loudspeakers.

OPERATING PRECAUTIONS

- Do not obstruct the ventilation grilles of the unit. Situate this product far from any heat sources and always ensure adequate air circulation around the ventilation grilles.
- Do not overload this product for extended periods of time.
- Never force the control elements (keys, knobs, etc.).
- Do not use solvents, alcohol, benzene or other volatile substances for cleaning the external parts of this product.

ART 7 SERIES

EVOLUTION IN TECHNOLOGY, REVOLUTION IN SOUND

Back in 1996 RCF moved into the forefront of the active loudspeaker technology with the introduction of the ART Series: a loudspeakers range that was able to deliver perfect and powerful sound with a lightweight cabinet strong enough to withstand everyday use.
The RCF R&D team kept evolving the ART technology during the last decade, developing reference products such as the ART 322-A, the ART 310-A and the new digitally amplified ART 525-A.

The RCF Team always has the performer's needs at the forefront of the design in order to create new lines of speakers with renewed features, improved sound clarity and definition and even lighter weight systems.

The latest iconic design is the ART 7 Series: an evolution in the active loudspeaker technology with a revolutionary design and sound.
Every detail of the 7 Series has been carefully studied in order to offer musicians and professionals the perfect tool to amplify their performance, night after night. High quality materials, precise manufacturing, careful assembly and extensive quality control procedures complete the groundbreaking design work of the RCF R&D team.

COMPONENTS

All the transducers in the Art 7 Series speakers feature light weight neodymium magnets in order to guarantee a better performance and make for easier transportation.
All transducers are precision built taking advantage of RCF's superior moulding, assembly technologies and a wealth of professional knowledge and experience dedicated to achieving extremely high standards.

AMPLIFIERS

Art 7 Series Subwoofers are equipped with a new generation of 1000 Watt Digital Amplifiers. The result of this is very high output, extremely low distortion and an incredible natural sound.
Each amplifier presents both Stereo XLR/jack (Combo) balanced inputs, XLR output link, volume and a switchable crossover (80 Hz/110 Hz). The amplifier features a solid mechanical aluminium structure which not only stabilize the amplifier during transportation but also assist in the heat dissipation.
All the Art 7 Series amplifiers presents PFC power supply section in order to produce maximum output even in case of tension drops from main supply.

CABINETS

The new loudspeaker design looks aggressive whilst retaining familiar Art ergonomics and is the result of extensive combined functional and acoustic research.
The Art 7 Series subwoofer cabinets are built in birch plywood and are designed to dampen down vibrations even at maximum volume settings. The reflex porting has been resized to offer a better efficiency. The cabinet is equipped with 2 ergonomically designed forged aluminium handles with rubber handgrip. At the top a rugged steel pole mount has been installed in all models.

REAR PANEL FEATURES AND CONTROLS

1 STEREO JACK/FEMALE XLR INPUTS (BAL/UNBAL)
The system accept jack or XLR input connectors.

2 LIMITER LED
The amplifier has a built in limiter circuit to prevent clipping of the amplifiers or overdriving the transducers. When the soft clipping circuit is active the LED blinks orange. It is okay if the limit LED blinks occasionally. If the LED blinks frequently or lights continuously, turn down the signal level.

3 SIGNAL LED
The signal indicator lights green if there is signal present on the main XLR input.

4 STATUS LED
The status indicator flash if the temperature protection is active.

5 POWER LED
This green led is ON when the speaker is connected to the main power supply and the ON/OFF is in ON position.

6 MALE XLR SIGNAL/XOVER OUTPUT
The output XLR connector provides a loop trough for speakers daisy chaining (or provides a crossover output when the crossover switch is pushed).

7 VOLUME CONTROL
Adjust the amplifier volume.

8 LINK/XOVER OUT SWITCH
The output link is flat when the switch is OFF (the output signal is the same as the input signal), or is high passed when the switch is ON (to connect a satellite speaker).

9 XOVER SWITCH
This switch sets the crossover frequency of the OUTPUT SIGNAL at 80 Hz or 120 Hz.

10 PHASE SWITCH
This switch reverse the phase of the output signal.

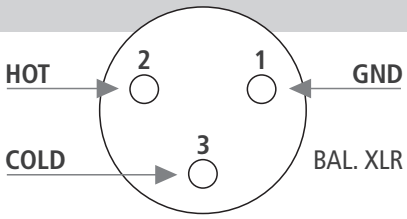
11 IEC AC SOCKETS
The IEC AC socket provides IN-OUT connections for the power cord to the socket and additional power link.

12 POWER MAIN SWITCH
The power switch turns the AC power ON and OFF.

CONNECTIONS

The XLR connectors use the following AES standard:

PIN 1 = GROUND (SHIELD)
PIN 2 = HOT (+)
PIN 3 = COLD (-)



BEFORE CONNECTING THE SPEAKER

On the back panel you will find all the controls, the signal and current inputs. At first verify that the voltage selector on the speaker is in proper position for your country (115 Volt or 230 Volt).
The switch shall be in proper position (unless moved from unauthorized people), but a fast check will avoid problems. In case is necessary to change the voltage please call your vendor or authorized RCF SERVICE CENTRE. This operation require the substitution of the fuse value and is reserved to an RCF SERVICE CENTRE.

BEFORE TURNING ON THE SPEAKER

At this point you can connect the power supply cable and the signal cable, but before turning on the speaker make sure that the volume control is at the minimum level (even on the mixer output). It is important that the mixer is already ON before turning on the speaker. This will avoid damage to the speakers and noisy "bumps" due to turning on parts on the audio chain. It is a good practice to always turn on speakers at last and turn them off immediately after the show.
Now you can turn ON the speaker and adjust the volume control to a proper level.

INSTALLATION

A 35 MM socket for mounting a satellite loudspeaker on a pole mount is provided on the top of the cabinet.

⚠ **WARNING: Never suspend ART speakers by there handles. Handles are intended for transportation, not for rigging.**

PROTECTIONS

ART Series active speakers are equipped with a complete system of protection circuits. Two led on the amplifier back panel indicate the working status of the amplifier: the green led indicate that the speaker is ON and the red led is on when the protection circuit is active. The circuit is acting very gently on audio signal, controlling level and maintaining distortion at acceptable level. If this led is ON for a long period is better to reduce immediately the signal level from the mixer or from the speaker volume control.

VOLTAGE SETUP

(RESERVED TO THE RCF SERVICE CENTRE)

- 230 Volt, 50 Hz SETUP:
  FUSE VALUE T10 AL 250V
- 115 Volt, 60 Hz SETUP:
  FUSE VALUE T5 AL 250V

ART 7 SERIES SUBWOOFERS TECHNICAL SPECIFICATIONS

	Art 902-AS 7series	Art 905-AS 7series	
ACOUSTICAL			
Frequency response	45 - 120 Hz	40 - 120 Hz	
Max SPL	130 dB	131 dB	
Crossover Point	80 - 120 Hz	80 - 120 Hz	
TRANSDUCERS			
Low frequency	12" neo 3"voice coil	15" neo 3"voice coil	
AMPLIFIER			
Total power	1000 Watt	1000 Watt	
CONNECTIONS			
Signal Input/Output	Combo Stereo Jack-XLR male / XLR female		
Power Input	In-Out VDE AC socket		
Controls	Phase, Crossover Switches		
ANALOG INPUT			
	2 way equalisation, Crossover Filtering		
	Fast limiter		
	RMS limiter		
MECHANICAL			
Size	515x410x550	600x445x600	
Weight	29.6 Kg	34.0 Kg	
Colour	Black	Black	

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